



SEQUENCE LISTING

RECEIVED

OCT 05 2001

TECH CENTER 1600/2900

<110> Conti-Fine, B.

<120> Methods to treat undesirable immune responses

<130> 600.423US1

<140> US 08/991,143

<141> 1997-12-16

<160> 3

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1667

<212> DNA

<213> Homo sapiens

<400> 1

F2

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ctaaaatgga	atccagatga	ctatggcggt	gtgaaaaaaa	ttcacattcc	ttcagaaaag	360
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acctttatgt	aagtttatgg	ccttgaagtg	ttttcatatt	gcttctccct	ttagttctgc	1620
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<210> 2

<211> 457

<212> PRT

<213> Homo sapiens

<400> 2

Met	Glu	Pro	Trp	Pro	Leu	Leu	Leu	Leu	Phe	Ser	Leu	Cys	Ser	Ala	Gly
1					5				10					15	

Leu Val Leu Gly Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe
 20 25 30
 Lys Asp Tyr Ser Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val
 35 40 45
 Val Glu Val Thr Val Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp
 50 55 60
 Glu Val Asn Gln Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gln Trp
 65 70 75 80
 Val Asp Tyr Asn Leu Lys Trp Asn Pro Asp Asp Tyr Gly Gly Val Lys
 85 90 95
 Lys Ile His Ile Pro Ser Glu Lys Ile Trp Arg Pro Asp Leu Val Leu
 100 105 110
 Tyr Asn Asn Ala Asp Gly Asp Phe Ala Ile Val Lys Phe Thr Lys Val
 115 120 125
 Leu Leu Gln Tyr Thr Gly His Ile Thr Trp Thr Pro Ala Ile Phe
 130 135 140
 Lys Ser Tyr Cys Glu Ile Val Thr His Phe Pro Phe Asp Glu Gln
 145 150 155 160
 Asn Cys Ser Met Lys Leu Gly Thr Trp Thr Tyr Asp Gly Ser Val Val
 165 170 175
 Ala Ile Asn Pro Glu Ser Asp Gln Pro Asp Leu Ser Asn Phe Met Glu
 180 185 190
 Ser Gly Glu Trp Val Ile Lys Glu Ser Arg Gly Trp Lys His Ser Val
 195 200 205
 F2 Thr Tyr Ser Cys Cys Pro Asp Thr Pro Tyr Leu Asp Ile Thr Tyr His
 210 215 220
 Phe Val Met Gln Arg Leu Pro Leu Tyr Phe Ile Val Asn Val Ile Ile
 225 230 235 240
 Pro Cys Leu Leu Phe Ser Phe Leu Thr Gly Leu Val Phe Tyr Leu Pro
 245 250 255
 Thr Asp Ser Gly Glu Lys Met Thr Leu Ser Ile Ser Val Leu Leu Ser
 260 265 270
 Leu Thr Val Phe Leu Leu Val Ile Val Glu Leu Ile Pro Ser Thr Ser
 275 280 285
 Ser Ala Val Pro Leu Ile Gly Lys Tyr Met Leu Phe Thr Met Val Phe
 290 295 300
 Val Ile Ala Ser Ile Ile Thr Val Ile Val Ile Asn Thr His His
 305 310 315 320
 Arg Ser Pro Ser Thr His Val Met Pro Asn Trp Val Arg Lys Val Phe
 325 330 335
 Ile Asp Thr Ile Pro Asn Ile Met Phe Phe Ser Thr Met Lys Arg Pro
 340 345 350
 Ser Arg Glu Lys Gln Asp Lys Lys Ile Phe Thr Glu Asp Ile Asp Ile
 355 360 365
 Ser Asp Ile Ser Gly Lys Pro Gly Pro Pro Pro Met Gly Phe His Ser
 370 375 380
 Pro Leu Ile Lys His Pro Glu Val Lys Ser Ala Ile Glu Gly Ile Lys
 385 390 395 400
 Tyr Ile Ala Glu Thr Met Lys Ser Asp Gln Glu Ser Asn Asn Ala Ala
 405 410 415
 Ala Glu Trp Lys Tyr Val Ala Met Val Met Asp His Ile Leu Leu Gly
 420 425 430
 Val Phe Met Leu Val Cys Ile Ile Gly Thr Leu Ala Val Phe Ala Gly
 435 440 445
 Arg Leu Ile Glu Leu Asn Gln Gln Gly
 450 455

<210> 3
 <211> 437
 <212> PRT
 <213> Torpedo californica

<400> 3
 Ser Glu His Glu Thr Arg Leu Val Ala Asn Leu Leu Glu Asn Tyr Asn
 1 5 10 15
 Lys Val Ile Arg Pro Val Glu His His Thr His Phe Val Asp Ile Thr
 20 25 30
 Val Gly Leu Gln Leu Ile Gln Leu Ile Ser Val Asp Glu Val Asn Gln
 35 40 45
 Ile Val Glu Thr Asn Val Arg Leu Arg Gln Gln Trp Ile Asp Val Arg
 50 55 60
 Leu Arg Trp Asn Pro Ala Asp Tyr Gly Gly Ile Lys Lys Ile Arg Leu
 65 70 75 80
 Pro Ser Asp Asp Val Trp Leu Pro Asp Leu Val Leu Tyr Asn Asn Ala
 85 90 95
 Asp Gly Asp Phe Ala Ile Val His Met Thr Lys Leu Leu Leu Asp Tyr
 100 105 110
 Thr Gly Lys Ile Met Trp Thr Pro Ala Ile Phe Lys Ser Tyr Cys
 115 120 125
 Glu Ile Ile Val Thr His Phe Pro Phe Asp Gln Gln Asn Cys Thr Met
 130 135 140
 Lys Leu Gly Ile Trp Thr Tyr Asp Gly Thr Lys Val Ser Ile Ser Pro
 145 150 155 160
 Glu Ser Asp Arg Pro Asp Leu Ser Thr Phe Met Glu Ser Gly Glu Trp
 165 170 175
 Val Met Lys Asp Tyr Arg Gly Trp Lys His Trp Val Tyr Tyr Thr Cys
 180 185 190
 Cys Pro Asp Thr Pro Tyr Leu Asp Ile Thr Tyr His Phe Ile Met Gln
 195 200 205
 Arg Ile Pro Leu Tyr Phe Val Val Asn Val Ile Ile Pro Cys Leu Leu
 210 215 220
 Phe Ser Phe Leu Thr Gly Leu Val Phe Tyr Leu Pro Thr Asp Ser Gly
 225 230 235 240
 Glu Lys Met Thr Leu Ser Ile Ser Val Leu Leu Ser Leu Thr Val Phe
 245 250 255
 Leu Leu Val Ile Val Glu Leu Ile Pro Ser Thr Ser Ser Ala Val Pro
 260 265 270
 Leu Ile Gly Lys Tyr Met Leu Phe Thr Met Ile Phe Val Ile Ser Ser
 275 280 285
 Ile Ile Ile Thr Val Val Val Ile Asn Thr His His Arg Ser Pro Ser
 290 295 300
 Thr His Thr Met Pro Gln Trp Val Arg Lys Ile Phe Ile Asp Thr Ile
 305 310 315 320
 Pro Asn Val Met Phe Phe Ser Thr Met Lys Arg Ala Ser Lys Glu Lys
 325 330 335
 Gln Glu Asn Lys Ile Phe Ala Asp Asp Ile Asp Ile Ser Asp Ile Ser
 340 345 350
 Gly Lys Gln Val Thr Gly Glu Val Ile Phe Gln Thr Pro Leu Ile Lys
 355 360 365
 Asn Pro Asp Val Lys Ser Ala Ile Glu Gly Val Lys Tyr Ile Ala Glu
 370 375 380
 His Met Lys Ser Asp Glu Glu Ser Ser Asn Ala Ala Glu Glu Trp Lys
 385 390 395 400
 Tyr Val Ala Met Val Ile Asp His Ile Leu Leu Cys Val Phe Met Leu
 405 410 415

F2

Ile Cys Ile Ile Gly Thr Val Ser Val Phe Ala Gly Arg Leu Ile Glu
420 425 430
Leu Ser Gln Glu Gly
435
